



## Project reveals superconducting current

An unusual post-Cold-War collaboration will enable scientists for the first time to see the precise path of electrical current as it flows through high-temperature superconductors.

The new imaging technique was developed by researchers at Argonne and former Soviet scientists from the Institute of Solid State Physics (ISSP) outside Moscow in collaboration with Phase Metrics of San Diego.

The technique could be key to developing high-temperature superconductors that carry 10 times more electrical current than previously possible, and could lead to improved magnetic materials such as recording devices and floppy disks. It was the subject of an article in the July 6 issue of the scientific journal *Nature*.

High-temperature superconductors carry current without losing energy. But they are brittle and difficult to make into current-carrying wire long enough to have practical uses.

"Identifying the precise location in the material where current flow stops is crucial to understanding why it stops," said Argonne scientist George Crabtree (MSD). "That knowledge will help researchers improve the material's ability

to carry current."

Other Argonne employees working with Crabtree include Ulrich Welp (MSD), physics graduate student David Gunter and Vitale Vlasko-Vlasov.

The 2<sup>1</sup>/<sub>2</sub>-year, \$500,000 joint research project uses a process called magneto-optical-flux imaging to pinpoint the tiny particles that interrupt current flow. Key to the process is a special indicator film invented by the former Soviet scientists.

Now that researchers can see the "road-blocks," they can experiment with different superconducting samples to make the best pathway for the electrical current, said Carlos A. Durán of Phase Metrics.

The new imaging technique is already being used to improve the performance of commercial wires in a joint Argonne-industry program sponsored by the Department of Energy. The ISSP scientists joined the project through a subcontract with Argonne.

Phase Metrics is providing \$250,000 in materials and effort. Cost-sharing is provided by the DOE and the National Science Foundation.

## NSF Director Lane will speak Aug. 10

Neal F. Lane, Director of the National Science Foundation, will speak on "The Scientist in the Age of Unreason" at a Director's Special Colloquium Thursday, Aug. 10.

The colloquium will begin at 3 p.m. in the Building 362 Auditorium.

Lane was sworn in as director of the National Science Foundation in 1993. The foundation is an independent agency of the federal government that provides support for research and education in science, mathematics and engineering.

Previously, Lane was provost and professor of physics at Rice University, Houston, Texas. Lane has authored or co-authored more than 90 scientific papers and publications, including a textbook on quantum physics. He has received many honors for his work as a scientist and educator, and served on several advisory committees for federal agencies.

## Bischof honored for 'ADIFOR 2' software

The 1995 Wilkinson Prize for Numerical Software has been awarded to Argonne's Chris Bischof (MCS) and Alan Carle of Rice University for ADIFOR 2.

ADIFOR, which stands for "automatic differentiation of Fortran," is a system for computing the derivatives of functions defined by Fortran 77 computer programs.

The ADIFOR project was started in 1991 at Argonne in collaboration with Andreas Griewank and George Corliss (MCS).

The present version of the system, ADIFOR 2, provides a new level of ease of use, flexibility, and computational capability. Developed with the aid of Andrew Mauer (STA) and Peyvand Khademi (MCS), ADIFOR 2 supports all features of Fortran 77, including complex arithmetic. ADIFOR 2 was cited as being a significant advance in numerical software.

The Wilkinson Prize honors James Hardy Wilkinson and his many contributions to the field of numerical software. The award is presented to the entry that best addresses all phases of the preparation of high quality numerical software.



**Chris Bischof (MCS)**

The award was presented July 3 at the International Conference in Industrial and Applied Mathematics in Hamburg. The prize is sponsored by Argonne, the National Physical Laboratory and the Numerical Algorithms Group.

## Early retirement incentive offered to 550 employees

About 550 eligible Argonne employees have been notified of a voluntary incentive program for early retirement designed to help reduce or avoid possible future reductions in force.

Employees 55 and older with a service date of 15 or more years are eligible to receive a lump-sum payment if they retire by Sept. 29.

Incentives for exempt employees, with years of service and percentage of annual salary, are:

- First 15 years: 2 percent per year of service.
- 15 years through 20 years: 30 percent plus 3 percent for each year over 15 years
- 20 years through 25 years: 45 percent plus 4 percent for each year over 20 years
- More than 25 years: 65% plus 5% for each year over 25 years, not to exceed 1 full year's pay.

Non-exempt employees who take advantage of this program receive 7.5 days' pay for the first year of service, and 3.75 days' pay for each additional year of credited service.

Incentives cannot exceed \$60,000 per employee, and the lump sum incentive program is taxable. Medical and life insurance are included in accordance with existing early retirement policies.

The extent of future involuntary reductions in force is not known.

## Inside this issue of Argonne Week

■ Changes are in store for U.S. Savings Bonds, and the lab's annual bond drive. Page 2.

## Changes in store for bonds, bond drive

The Treasury Department has changed the way Series EE U.S. Savings Bonds earn interest.

The interest rate will float for bonds bought on or before May 1, 1995, and held for less than five years. The new short-term rate will be 85 percent of the average yield on six-month Treasury bills for the preceding months. The long-term savings bond rate is 85 percent of the average of five-year Treasury security yields.

Savings bonds used to pay 4 percent interest if held for less than 5 years, and a higher floating rate if held longer.

"The new rates are more competitive and give small investors a fairer return on the money they lend the government," said Jill Morgenthaler (OPA), who chairs the laboratory's 1995 Savings Bond drive.

To explain how the new program operates, a representative from the U.S. Treasury Department will be at Argonne-East Monday, August 7th. The open meeting will be held at 10 a.m. in Building 362 Auditorium.

### Bond drive changes

Argonne has changed the distribution method of savings bonds applications. To save on time and money, distribution will be made by mail directly to each employee instead of through canvassers. More information will be available at the August 7th meeting, or call Jill Morgenthaler (OPA) at ext. 2-2725.

## Work begins on wastewater plant upgrade

Groundbreaking for a major upgrade to Argonne-East's Sanitary Wastewater Treatment Plant took place July 28.

The project will replace or rehabilitate equipment that has surpassed its design life and will allow the facility to comply with National Pollutant Discharge Elimination System permit requirements. Construction will be completed by the summer of 1996.

Argonne's domestic sewage is conveyed through the sanitary sewer system to the plant, which has been in service for more than 40 years. Duplicate process units that doubled the

capacity of the existing plant were built in 1961. Other minor improvements have been made, but the average design life for facilities of this type is 25 to 30 years.

The new design will correct process deficiencies to the pretreatment, primary treatment, secondary treatment, and solids handling operations.

Process instrumentation and control facilities also will be improved. Planned improvements take into account future facilities including the Advanced Photon Source and its user residence facility.

## ANL Toastmaster takes 3rd in 6-state contest



Morgenthaler

Jill Morgenthaler, OPA's special events manager and member of Argonne's Toastmasters Club, recently won third place in the Toastmasters Regional 5 Competition for her humorous speech titled "Ob-session."

Morgenthaler competed against Toastmasters from six states in the con-

test, the highest level of competition for humorous speeches.

"It was the highlight of my speaking career," said Morgenthaler, who has been a Toastmaster for four years. Her next goal is to advance to the international competition with a motivational speech.

The Argonne Toastmasters meet the second and fourth Wednesday of every month from noon to 1 p.m. in Building 201, Room 274. For information, call Richard Lee (ET) at ext. 2-7927.

## New forms required for release, publication

The Information and Publishing Division (IPD) has revised the form for clearing documents and developed a new, separate form for ordering reprints and paying publication costs.

Starting Sept. 1, IPD-Publications and Record Services will accept only the new forms: the revised "unclassified document release" form (ANL-330) and the new publication cost form (ANL-330A). The change affects employees who publish or release information, or order reprints that require fees.

IPD-PRS will offer four training classes at Argonne-East to explain these new forms:

■ Wednesday, August 9, 2 p.m. to 3 p.m. in Building 900, room A04

■ Friday, August 11, 9:30 a.m. to 10:30 a.m. in Building 202 room B169

■ Wednesday, August 23, 9:30 a.m.-10:30 a.m. in the Building 203 Auditorium

■ Monday, August 28, 9:30 a.m.-10:30 a.m. in the Building 362 Auditorium.

Attendance is recommended for authors, publication handlers, editors, secretaries, and managers. Those who need information but cannot attend these classes should call ext. 2-5610 to schedule a separate session.

## Representatives to explain new Microsoft products

Representatives from Microsoft, Inc. will be presenting two technical briefings in Argonne-East's Building 203 auditorium on Aug. 8.

■ The first session, from 9 a.m. to noon, will cover Windows NT Server V3.51 and BackOffice. Microsoft BackOffice comprises a Microsoft Windows NT Server as the network foundation, Microsoft SQL Server for managing and storing data; Microsoft SNA Server for host connectivity, Microsoft Systems Management Server for managing Macintoshes, PCs and servers, and Microsoft Mail Server for distributing information.

■ The second session, from 1 p.m. to 3:30 p.m., will cover Microsoft Windows 95 and Office 95. Windows 95 is an integrated 32-bit operating system. Microsoft Office comprises Excel spreadsheet software, Power Point presentation software; the Microsoft Word word processor, and Microsoft Access database.

Network administrators and users planning to use any of these products should attend. Door prizes will be given away during each session.

For more information contact Tim Hentsch (ECT-ELT) at Hentsch@anl.gov or ext. 2-6969.

## Fall session nears; high rollers sought for bowling league...

The Argonne-East Mixed Bowling League needs bowlers for the 1995-96 season.

The league bowls at 6:30 p.m. Wednesday evenings at the Strike 'N Spare II bowling alley in Lockport.

To join the league, or for more information, call Janet Carothers (CMT) at ext. 2-1499 or Bob Gronemeyer (ESH-HP) at ext. 2-6693.

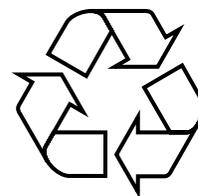
## ... and pool league wants new shooters

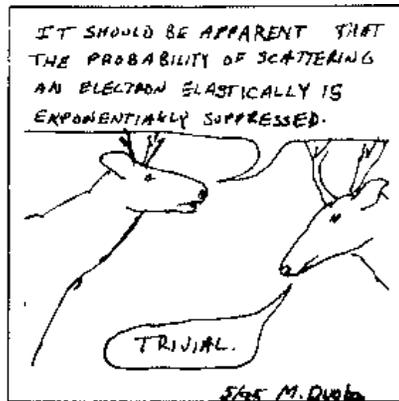
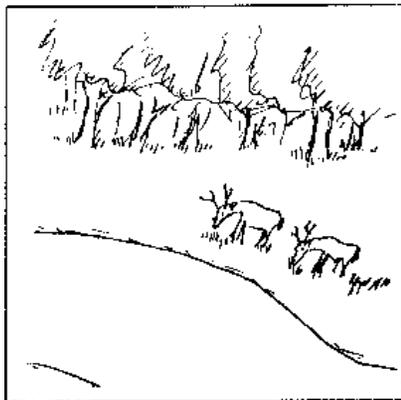
The Argonne-East Pool League's fall session begins at 6 p.m. Tuesday, Aug. 22, at Le Cue Billiards and Sports Lounge, 8109 S. Cass Ave. in Darien.

No experience is necessary to join. Previous team captains and anyone else interested in joining the league should call Debbie Mounce (IPD) at ext. 2-3372.



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Cartoon by Michael Duoba (ES-CTR)

## Seminars

Send seminar listings to Evie Fagan, Building 201, Room 2U-09 (OPA-201). Deadline is 5 p.m. Monday. Seminar listings *only* can be sent by E-mail to [evie\\_fagan@qmgate.anl.gov](mailto:evie_fagan@qmgate.anl.gov).

### Monday, August 7

High Energy Physics Division Theoretical Physics Seminar: **"Nucleon Spin Structure Functions in Perturbative QCD"** by Tsuneo Uematsu, FIHS, Kyoto University. 2 p.m., Bldg. 362, Conference Room E188.

Joint Technology Development and Chemistry Division Seminar: **"Processing of Ceramic Materials: Synthesis and Surface Property Evaluation of Non-Oxide Ceramics"** by A. S. Rao, Naval Surface Warfare Center. 2 p.m., Bldg. 207, Room DA-126.

Physics Division Seminar: Report of **"Observation of Bose Einstein Condensation in a Dilute Atomic Vapor"** by M.H. Anderson, et al., Science 269, 198 (1995). 3:30 p.m., Bldg. 203, Conference Room R150.

### Wednesday, August 9

Special Atomic & Molecular Physics Division Seminar: **"X-Rays: from Röntgen to the Present"** by Paul H. Mokler, GSI, Darmstadt, Germany. 1 p.m., Bldg. 203, Conference Room R150.

### Thursday, August 10

High Energy Physics Division Seminar: **"The Partonic Structure of Diffraction"** by John Dainton, University of Liverpool. 4 p.m., Bldg. 362, Conference Room E188.

### Friday, August 11

Energy Systems Division, Waste Management & Bioengineering Section Seminar: **"The Potential of Lactate Esters in "Green" Solvent Applications"** by Eugene P. Bergemann, President, NTEC, Inc., Hoffman Estates, IL. 10 a.m., Bldg. 362, Conference Room E356.

## ARGONNE WEEK IS ONLINE

The current edition of Argonne Week, and some back issues, are available in both text-only and Acrobat ".pdf" format from the Macintosh Public Volume, PC PUBLIC, and Argonne's World-Wide Web site.

Argonne's World Wide Web home page is at <http://www.anl.gov>. To see the Acrobat version of Argonne Week, click on the links "News about Argonne," "For Argonne Employees" and "Text with graphics: This week."

Employees needing assistance in installing and configuring network software or accessing the public volumes should contact their network administrator or Electronics and Computing Technologies (ECT) computer consultants at ext. 2-5405.

## Ar'Gang

### NEW ARRIVALS

A boy, Kevin, born June 28 to first-time parents, Wenjie and **Xiao Wu** (MSD); a girl, Bianca, born July 26 to Santiago and **Lorenza Salinas** (IPD-MED); a son, Marcus, born July 11 to **Mary** (ECT-ELT) and **Ed Westbrook** (CMB); a son, Andrew John, born July 6 to Melissa and **Bill Gasper** (EA); a girl, Isabelle Cecelia, born April 12 to Lydia and **Randy Clarksean** (TD/AW); a girl, Ellen Rachel, born April 4 to Melanie and **Mike Goff** (TD/AW); a son, Cody Greg, born June 12 to Darren and **Melissa Robinson** (FO/AW); Proud grandparents: a grandson, Kevin James, born July 25 for Betty and **Dave Wade** (RA); a grandson, Patrick Ethan Zelko, born June 28 for Greg and **Jeannie Verklan** (RA); a grandson, Brian Daniel, born April 18 for first-time grandparents **Rose Lee Pausche** (CMB) and **Paul J. Pausche** (SSD-CS); a grandson, Brandis Lewis Heffner, born April 7 and another grandson, Matthew Wayne Rapnikas, born June 19 for Bill and **Marilyn Gliva** (TD); a granddaughter, Rianna Lee Ray, born May 5 for Donna and **Douglass Ray** (FO/AW).

### WELCOME

RA welcomes **Ebru Demir**, **Tatsuya Maeda**, **Florence Prunier** and **Christophe Vergne**. SSD-SEC welcomes **Carol Martin**. DIS-ACAG welcomes **William Horsthemke**. PHY welcomes **Dieter Ackermann**, **YuMi Kim** and **John Szech**.

### ACHIEVEMENTS

Mary Lou Kator, wife of **Bill Kator** (ASD) was ordained as Deacon of the Episcopal Church. **Joan Waltz** (OPA) completed the Administrative Foundations in Public Services program at DePaul University. **Rogert Hanscom** (DIS-ACAG) received a letter of commendation for outstanding effort from the Joint Staff. **Dale Wahlquist** (TD/AW) received a Masters in Mechanical Engineering. **Daniel Garcia** (RPS/SPM) received Bachelor of Science in Education. **Lance Revo** (RPS/SEC) received a Masters of Education in Occupational Training Management and was inducted into Phi Kappa Phi Honoray Society. Elsie Harper, daughter of **Henry Harper, Sr** (IFR/OPS) received a Doctor of Medicine with highest honors. **Connie Hutchens** (RPS/PRO) has received CPS certification. **Bill Perry** (FO/AW) received the University of Chicago Distinguished Performance Award.

### WEDDINGS/ENGAGEMENTS

Congratulations to **Jo Ann Parnell** (ES) on her daughter Kathy Lawlor's marriage to Jeffery Patrick on June 10; to **Bill Schertz** (EEST) on his daughter Debra's marriage to Justin Wright on July 22. Best wishes to **Christine Rimbo** (DIS-ACAG) and Joseph C. Ostrander on their engagement.

### GET WELL WISHES

Wishes for a speedy recovery to **Mary Westbrook** (ECT-ELT) and to **Paul Persiani** (TD) who is recovering from back surgery.

### FAREWELL

Good luck to **Benjamin Crowell**, **Stacey Schiel**, **Shannon Cyborski** and **Jeff Wendlandt** (all PHY); and **Joe Paulini** (IPD-MED); **Carol Hughes** (RPS/SEC); **Darby Smith** (RPS/CCS); **Melissa Robinson** and **Amy Rutledge** (FO/AW) who have all left the laboratory.

### TRANSITIONS

Good luck to **Iouri Prokofiev** who has transferred from TD to RA; to **Connie Markiewicz** who transferred from EMO to TD; to **Julie Stech** who transferred from OCF-ACT to TD to **Pam Dalman** who transferred from MSD to APS and **Monty L. Conley**, FO/AW, has transferred from Operations to Engineering.

### CONDOLENCES

Condolences to **Ron Sundell** (ES) on the death of his father; to **Mike** and **Pat Wilkey** (ES) on the death of their uncle; to **Jan Griffin** (MCS) and **Laurie Ambrose** (CMT) on the death of their mother, Joyce Leonard (formerly of ACT); to **Tom Clayton** (TD) on the death of his son; to **Jim Snelgrove** (TD) on the death of his mother; to **Terry Lucitt** (TD) on the death of his mother; to **Nelson Hanan** (TD) on the death of his father and mother-in-law; and to **Dai-Kai Sze** (TD) on the death of his father; **Lori Greenwood** (EA) on the death of her grandmother.

### CONTRIBUTORS

Thanks to this issue's contributors: **Marcianne Ambats** (TD); **Diane Bailey** (MSD); **Judy Beumer** (MCS); **Barbara Burke** (ECT-ELT); **Laurie Christensen** (RPS/AW); **Anna Hamilton** (SSD-SEC); **George Joch** (IPD-MED); **Eileen Johnson** (RA); **Jo Ann Parnell** (ES); **Eleanor Robson** (EA); **Jean Slater** (DIS) and **Barbara Weller** (PHY).

# Classified Ads

## MISCELLANEOUS

**GARAGE SALE** — Saturday, Aug. 5, 9 a.m. - 4 p.m., 4328 W. 111th Street, Oak Lawn. Clothes, furniture, crafts, books, records & more. Cindy Crawford, (708) 974-1619.

**MISCELLANEOUS** — Rear end out of 1970 Monte Carlo, 12 bolt position, 456 gear aluminum cover & brake drums. \$500. 4 bolt block only, 350 Chevy. \$100. Danny Sims, (708) 849-3604.

**TANKS** — 2 barbecue grill type, 20# propane tanks, good condition. \$12 each. Richard Konecny, (708) 964-3660.

**ENTERTAINMENT UNIT** — Medium oak shade, 48" x 59" x 21", fits 27" TV, storage cabinets to hold video tapes & CD's, 3 shelves, solidly built David Meyer, (708) 637-1765.

**AIR CONDITIONERS** — Kenmore, window unit, 12,500 BTU, 110 volt, used one season. \$150. 14,000 BTU, 220 volt, older model but works good. \$50. Jack Jones, (708) 957-3618.

**BICYCLE** — Ladies style frame, 6 speed, very new, perfect bike to add a child carrier. \$90. Pat Dombrowski, (708) 789-1205.

**DRYER** — Whirlpool, electric, approximately 4 years old. \$100. David Fallin, (708) 729-3760.

**ANSWERING SYSTEM** — Includes announcement & incoming message cassettes, power supply & instruction booklet. \$10. Joseph Ello, (708) 447-7967.

**MISCELLANEOUS** — 30" Kenmore gas range, white, like new. \$150. Wood window, fits 29 1/8" x 47 1/4" opening, grids & screen, crank opening. \$75. Dolores Ray, (708) 920-9229.

**BEDROOM SET** — Full size bed, headboard, mattress, night stand, lamp, dresser, mirror & chest of drawers, good condition. \$200 o.b.o. Jim Oprzedek, (312) 586-0044.

**PRINTER** — Tandy dot matrix printer, DMP 440, plus large supply of paper. \$100 o.b.o. Margy Ortigara, (708) 429-2368.

**BIKES** — Girl's yellow 19". \$15 o.b.o. Boy's 19", red Huffy. \$25 o.b.o. Dave Bartels, (708) 985-2406.

**MISCELLANEOUS** — Kohler aspen green toilet. \$100. 37" marble white/aspen green sink. \$100. Arnetta Bryant, (312) 779-4123.

**RIMS & TIRES** — 5, original off 1986 Chevy Blazer K5. Best offer. Edgar Garza, (312) 471-6369.

**MISCELLANEOUS** — Magnavox 20" television, 2 years old, stereo. New \$270 - asking \$120. Baby changing table including shelf, drawers, bathtub. \$50. Infant car seat. \$20. Roland Fehrenbacher, (708) 357-8942.

**AIR CONDITIONERS** — GE, window unit, 5000 BTU. \$100. Hot Point, 5000 BTU. \$75. Philip Potts, (708) 355-1959.

**MISCELLANEOUS** — Truck grille, '86-'87 Ford pickup. \$10. Panasonic camcorder, PV500. \$325. 24" girls 3 speed bike. \$20. John Urban, (708) 985-9164.

**GOLF CLUBS** — Tommy Armour 1995 845 irons, sand wedge, custom made w/Aldila HM-40 graphite shafts, used 1 month. New \$1,100 - asking \$500. Fred Onesto, (708) 985-2623.

**MISCELLANEOUS GOLF** — Ladies Wilson Staff "Patty Berg" irons, 3-PW. \$75. Lite weight collapsible carry bag w/matching head covers. \$20. Lite weight carry bag. \$25. All in very good condition. Fred Onesto, (708) 985-2623.

## AUTOMOBILES

1984 HONDA — Accord, PT, PS, good running condition. \$1,500. Rajeev Mehta, (708) 663-0642.

1990 BUICK — Excellent condition, take over payment or lease. Rajeev Mehta, (708) 663-0642.

1990 BUICK — Station wagon, white, fully loaded, well maintained, excellent condition, 77K miles. \$7,975. Ronald Turski, (708) 983-7383.

1981 VW — Rabbit, model LS, AC, PB, clean, good condition, 79K miles, 4 speed manual, original owner. \$1,200. Albert Fischer, (708) 246-4389.

1987 FORD — Escort GT, 1.9L, red exterior/gray interior, 5 speed, recent tires, high mileage, clean & runs well, no rust. \$1,600. Jim Kuiper, (708) 810-9247.

1989 MERCURY — Grand Marquis, automatic load-leveling, trailer tow package, newer Aqua Treds, 57K miles, Oxford white, AC, CC, PS, PB, 5.0L, V8, new pipes, garage kept, excellent condition. \$5,900. Wyman Harrison, (708) 983-8393.

1984 HONDA — Civic 1500S, 5 door, AM/FM, 94K miles, good condition. \$1,400 o.b.o. Amit Roy, (708) 769-1219 after 8 p.m.

1962 RAMBLER — 4 door sedan, blue, 20K original miles, no rust, all original, excellent condition. \$4,000. Sandra Tollaksen, (708) 897-2339

1973 LINCOLN — Continental, blue, 49K original miles, new tires, battery, great reliable car. \$4,500. Sandra Tollaksen, (708) 897-2339.

Classified ad request forms are available in stockrooms and at the Office of Public Affairs in Building 201. The old half-sheet forms are acceptable, but note that the deadline is incorrect. Deadline for classified ads is **5 p.m. Monday.**

Requests can be submitted by fax to ext. 2-5274, or by inter-office mail to Evie Fagan, Building 201, Room 2U-09 (OPA-201). A drop-off box is located at the Argonne Week office, Building 201, room 2Q-02.

Request forms must be signed and must include a home phone number. Ads cannot be accepted by phone or electronic mail. Please limit ads to 25 words; longer ads may be edited. Housing listed for sale or rent is available without regard to race, creed, color or national origin.

1988 SUBARU — GL, 37K miles, hatchback, AT, PS, PB, PW, PDL, AM/FM cassette, clean. \$3,700 o.b.o. Ginger Warren, (708) 964-3241 - ask for Will.

1987 TRUCK — F250 XLT, 461, 4 speed, 80K summer miles, like new. \$8,000. Dawn Merdith, (815) 439-1115.

1976 PONTIAC — Catalina, 67K miles, AC, PS, PB, V8, AM/FM. Best offer. Rose Pausche, (7708) 739-0126.

1992 DODGE — Grand Caravan SE, 38K miles, full power, tint, tilt, cruise,

PS, PB, AC, child seats, VGC, new tires, ext. warranty. \$12,900. Terry Smith, (708) 652-9065.

1978 CHEVETTE — 4 door hatchback, 97K miles, new brakes & tires, runs good. \$375. Walter Kazich, (708) 257-2516.

1987 VW — Scirocco, red, 16 valve, 2 door coupe. \$4,200 o.b.o. John Kokinis, (708) 257-0675.

1984 OLDS — Cutlass Cierra, AC, AM/FM, PW, PL, PS, tilt wheel, cruise, 4 cyl, runs good, 100K miles. \$975 o.b.o. Ron Vollmer, (708) 416-1061.

1981 VW — Rabbit diesel, 40 mpg, silver, 2 door, mechanically excellent condition, sun roof, AM/FM cassette. \$1,000. Fred Brunner, (708) 232-9229.

1989 FORD — Taurus GL, PS, PB, AC, 80K miles, excellent condition. \$4,500 o.b.o. Klara Shiloh, (708) 852-9345.

1987 FORD — Ranger pickup, AC, AM/FM stereo/tape, 5 speed manual, custom cap, 79K miles, excellent condition. \$4,500 o.b.o. Norman Hill, (708) 739-5423.

## HOUSING

HOUSE/SALE — New construction, Plainfield school district, 81 x 178 lot w/ mature trees on dead-end street, 2-story w/2.5 car garage, tan vinyl siding w/

aluminum soffit, fascia & gutters, thermalpane windows, 3 bedrooms, 2.5 baths, kitchen w/island dinette & pantry, laundry room, banister overlooks 23 x 13 living room, oak cabinets, doors & trim throughout, vaulted ceilings, fireplace, full basement. \$144,900. Maria Addison, (708) 257-0092.

CONDO/RENT — Naperville, 2 bedrooms, 2 baths, 2 car attached garage, 2 balconies, FP, washer/dryer in condo, central air, dishwasher. Denise Vassallo, (815) 886-0918.

HOUSE/SALE — Lemont, 18 year old beautiful brick split level w/sub-basement, 1.75 baths, family room w/fireplace, hardwood floors, 4 bedrooms, detached 2.5 car garage (brick/cedar aluminum soffits & fascia). \$179,900. Judith Gerches, (708) 243-0152 - ask for Randy.

CONDO/SALE — 3 bedroom, 2 full baths, beautiful indoor heated pool, 1/2 mile east of lab, plenty of storage space \$69K. Pat Dombrowski, (708) 789-1205.

HOUSE/SALE — Joliet, far west, 25 minutes from lab, 4.5 years old, 2 story, 3 bedroom, 2.25 baths, 2 car garage, high efficiency air/furnace, finished basement, deck, fenced yard & much more. \$137,900. Jim Stefanov, (815) 725-3027.

HOUSE/RENT — Woodridge, academic year 1995-96, fully furnished 3 bedroom ranch. 2 baths, living room, dining room & family room, patio, large yard, 2 car garage, cul-de-sac, 15 minutes from lab, CA, good neighborhood schools, easy access to north Tollway, available Oct. 1. \$1,300/month. Harry Lipkin, (708) 932-4740.

CONDO/SALE — Willowbrook, 10 minutes from lab, 3rd floor, 1 bedroom, 1 bath, fireplace, all new kitchen & appliances, updated bathroom, new carpet throughout, secure building, balcony overlooks courtyard. Complex has two pools, tennis courts, clubhouse & fitness room. \$68,500. Mike Sodaro, (708) 323-6280.

HOUSE/SALE — Bolingbrook, Pasquinelli's Randolph model w/many upgrades, 2.5 years old, split level, 3 bedrooms, large living & family rooms, kitchen, dining room, 2 baths, sub-basement, utility room, vaulted ceilings, 2 car garage. \$137,900. S. Felix Krasnicki, (708) 759-5715.

APARTMENT/SUBLET — Visiting scientist would like to sublet furnished two bedroom apartment close to lab, possibly to another visitor, Aug. 26 - Sept. 15 or some part thereof. \$43/day. J. Woods Halley, (612) 624-0395.

## TO BE GIVEN AWAY

White, Netherland dwarf bunny, 4 years old, very small & gentle, cage & accessories included, nice pet for children. Jim Gleeson, (708) 983-0602.

## WANTED

Air compressor, about 3 or 4 HP, tanx mounted, reasonable. Garrett Rinehart, (708) 554-9089.

Toddler seat for automobile. Alice Townsend, (815) 725-3431.

Table mounted apple peeler. Marion Kopriva, (708) 325-0512.

Experienced dog sitter, your home for 4-month-old Fox Terrier mix puppy, friendly and housebroken, good w/kids, occasional weekdays, Joliet or Argonne area. LeAnn Turner, (815) 744-9247.

Gasoline powered ice auger. Reasonable. Hank Dowgwillo, (708) 469-2426.

Carpool arrangement or occasional ride share, commute from Evanston, irregular schedule. John Quinn, (708) 733-9445.

5 man bowling team, Friday nite, 6:20 P.M., Willowbrook Lanes. John Urban, (708) 985-9164.